

of geologic time. At present the Newcastle beds are regarded as Paleozoic, and the Ipswich beds as mesozoic. I cannot find any such clearly marked distinction. Many fossils are common to both deposits. The Ipswich coals are very rich in fossils, more rich and in better preservation than those of Newcastle. Yet strangely enough only seven species are recorded. On such slender materials it was hardly to be expected that satisfactory and final conclusions could be arrived at. Dr. Feistmantel's careful work has cleared the way, and made the work much more easy to local paleontologists. His complete figures and the number of them leaves nothing ambiguous or unsatisfactory. All Australian geologists will owe him a debt of gratitude, for his industry and zeal in the cause of our coal floras.

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RECORD OF NEW LOCALITIES OF POLYNESIAN MOSSES, WITH  
DESCRIPTIONS OF SOME HITHERTO UNDEFINED SPECIES.

BY WILLIAM MITTEN, F.L.S.

[When lately, on my request, the leading British Bryologist, Mr. W. Mitten, was induced to write a list of all known Australian Mosses, he noted also a number of Polynesian species, new either for science or for localities. These valuable manuscripts being placed unreservedly at my disposal, I beg now on his behalf to offer the Polynesian portion of his notes to the Linnean Society of New South Wales. As Port Jackson is that harbour in Australia from which communications with the South Sea Islands most extensively proceed, it will be easier for the Sydney Naturalists than for others, to see these searches for mosses followed up. The large bryologic collections formed by the Rev. Th. Powell in Samoa, and elaborated likewise by Mr. Mitten, lead us to anticipate that great riches of these kinds might also be gathered yet in many others of the island groups of the Pacific Ocean. The several mosses now recorded from

the collections of Mr. Strange, have a melancholy interest, as emanating from a Naturalist, whose home was in the metropolis of New South Wales, and whose last exploit terminated in the greatest of sadness.—FERD. VON MUELLER.]

OCTOBLEPHARUM, *Hedwig.*

*O. sanctum*, Hampe.

Aneitum, Milne.

SYRRHOPODON, *Schægrichen.*

*S. tenellum*, C. Muell, in Bot. Zeist., 1857, 777.

Isle of Pines, Cuming.

*S. albo-vaginatatum*, Schw.

Isle of Pines, Strange.

THYRIDIDIUM, *Mitten.*

*Th. subfasciculatum*, Hampe, (Codonoblepharum) in Linnæa, 1876, 303.

Tuo-Kuro Island.

CALYMPERES, *Bridel.*

*C. Taitensis*, Sullivant, in Amer. Expl. Exp., t. 4 (Syrrhopodon).

Aneitum, Milne.

LEIOSTOMA, *Mitten.*

*L. brachypodium*, C. Mueller.

Isle of Pines.

*L. Tongense*, Sull., in Amer. Expl. Exp. t. 5.

Isle of Pines (also Howe's Island).

RHIZOGONIUM, *Bridel.*

(*Pyrrhobryum*, Mitt.)

*Rh. setosum*, Mitt., in Seem. Fl. Vict., 384.

Aneitum.

RHACOPILUM, *Bridel.*

*Rh. spectabile*, Reinward and Hornsetuch.

Owen Stanley's Range, New Guinea; Rev. J. Chalmers.

*Rh. convolutaceum*, C. Muell.

Isle of Pines; Strange (also Australia).

DISTICHOPHYLLUM, *Dozy & Molkenbeer.*

(*Miniadelphus*, C. Mueller.)

*D. capillatum*, Mitten.

Caulis gracilis ruber; folia lateralia patula oblongo-ovalia, intermedia breviora. omnia flexuosa et apice in pilum tenuem acuminata, nervo tenui medio evanido ad marginem anguste limbata, integerrima, cellulis parvis rotundis pellucidis areolata

Aneitum, Strange.

*D. cuspidato* simile.

SPIRIDENS, *Nees ab Esenbeck.*

*Sp. flagellosus*, Schimper, in Nov. Act. 33, t. 4.

Aneitum, Milne; Isle of Pines, Strange.

OEDICLADIUM, *Mitten.*

*O. purpuratum*, Mitt., in Seem. Fl. Vit. 393.

Aneitum, Milne.

ENDOTRICHELLA, *C. Mueller.*

*E. Campbelliana*, Hampe.

Aneitum, F. A. Campbell.

*E. pulchra*, Mitten.

Rami simplices; folia dense inserta, compressu lateralia patentia, oblongo-lanceolata, concava, pluries plicata, apice excavata, acumine curvato terminata, ad margines superiores serrulata, nervis binis brevibus prædita, cellulis angustis elongatis areolata; perichæthalia parva, erecta, ad apicem subito brevipiculata; theca in pedunculo æquilongo inclinata, ovali-cylindræa, operculum brevi-rostratum.

Owen Stanley's Range, New Guinea, Rev. J. Chalmers.

Rami 4-8 centim. longi cum foliis 7 mm. lati. Folia nitida.

BRAITHWAITEA, *Lindberg.*

(*Dendro-Leskea*, Hampe.)

*Br. arborescens*, Mitten.

Aneitum, Milne.

POROTRICHUM, *Bridel.*

(*Leiophyllum*, C. Muell.)

*P. dendroides*, Hook, Musci exot. t. lxi., sub Neckera. *P. intermedium*, Augstrøm in Hedwigia, 1875, 61 (Omalia).

Isle of Pines, Strange.

THAMNIUM, *Schimper.*

*Th. Aneitense*, Mitt. in Seem. Fl. Vit., 397.

Aneitum, Milne.

RHAPHIDORRHYNCHUM, *Schimper.*

*Rh. contiguum*, J. Hook. & Wils. in Fl. Tasm., ii., 213. *Rh. subhomomallum*, C. Muell. in Bot. Zeit., 1857, 781.

Isle of Pines, Milne, Strange.

*Rh. Borbonicum*, Belanger.

Isle of Pines, Strange.

ACANTHOCLADIUM, *Mitten.*

(*Acanthodium*, Mitt., olim.)

*Ae. Strangei*, Mitt. & F. v. M.

Folia (e medio caulis primaris) ovata, subulato-acuminata; ramea ovato-lanceolata, margine superne serrulata, cellulis oblongis areolata; seta biuncialis; theca arcuata, inclinata, oblonga, subhorizontalis.

Isle of Pines, Strange.

*A. trimegisto* similis. Color stramineus, haud nitens.

*Ae. pedunculatum*, Mitten.

Folia (e caulis primaris medio) ovato-lanceolata; subulato-angustata, subintegerrima; ramea compressa, nitida, oblongo-lanceolata, apice obtusiuscula, marginibus superioribus acute denticulata, cellulis elongatis areolata; perichætium subbasilare, foliis erectis longe angustissimeque attenuatis formatum; pedunculus fere triuncialis; theca ovalis, subæqualis, nutans.

Aneitum, Milne.

*A. rigido* simillimum.

ENTODON, *C. Mueller.*

*E. pallidum*, Mitt., in Seem. Fl. Vit. 398.

Isle of Pines; Milne, Strange.

*E. Aneitense*, Mitten.

Folia ovata vel ovato-lanceolata in apicibus ramorum apertis.

Aneitum; Milne.

ISOPTERYGIUM, *Mitten.*

*Is. submicrothecum*, C. Muell., in Bot. Zeit., 1857, 781.

Isle of Pines; Cuming.

## ECTROPOTHECIUM, Mitten.

*E. Sandwichense*, Hooker.

Isle of Pines, Strange.

## HYPNODENDRON, C. Mueller.

*H. Milnei*, Mitt., in Seem. Fl. Vit. 401.

Aneitum, Milne.

*H. rigidum*, Mitt., in Seem. Fl. Vit. 401.

Aneitum, Milne.

*H. palmeum*, Mitten.

Stipes radicellis fuscis brevibus obtectus, ramis approximatis pinnato divisus comam rotundatam formans; folia stipitis ad basim auriculata, hastata, sensim lanciformi acuminata, nervo tenui excurrente prædita, margine auricularum crenulata, apicem versus subintegerrima; folia ramea ovato-lanceolata, nervo tenui percursa, margine serrulata, cellulis elongatis angustis areolata.

Statura adspertuque *H. fusco-mucronati*, (C. Muell. in Bot. Zeit. 1862). Stipes uncialis. Diametrus comæ circiter  $\frac{3}{4}$ --1 uncialis.

*H. Chalmersii*, Mitten.

Stipes eradiculosus, foliis appressis lanceolato subulatis tenui nervatis, margine remote serrulatis obtectus; rami recti curvati que simplices divisive in comam densam dispositi; folia compressa; lateralia patentia, parum majora ovata, acuta, nervo dorso dentato percursa, margine denticulata, cellulis elongatis areolata.

Owen Stanley's Range, New Guinea; Rev. J. Chalmers.

Stipes biuncialis; coma unciam sesque unciamve lata. Color pallide fusco-viridis.

THUIDIUM, *Schimper*.*Th. Campbellianum*, Hampe.

New Hebrides, F. A. Campbell.

DAWSONIA, *R. Brown*.*D. superba*, Greville.

Owen Stanley's Range, New Guinea, Rev. J. Chalmers.

[These have not yet been obtained in fruit; the foliage seems slightly different from that of the typical Australian species; hence I had distributed this grand moss as *D. Papuana*.—F.v.M.]

## DEFINITIONS OF SOME NEW AUSTRALIAN FUNGI.

BY THE REV. C. KALCHBRENNER.

*Agaricus (Lepiota) rhytipelta*, F. v. Mueller.

Pileo carnosio, ovato-campanulato, primum umbrino, in umbone glabro, dein peripheriam versus in squamas validas dissumpente subquibus albo sericeo-striato; stipite subaequali basi bulbiformi dilatato, glabro, albo, deorsum fuscescente; annulo mobili membraneo, persistente; lamellis liberis, ventricosis, latis, subconfertis.

Lake Muir, Thomas Muir; Muellersville, near Rockhampton, Madame Thozet; Western Port, Miss M. Lewellin. Habitus Ag. *Æypeslaris* (Bulliard), sed major et annulus mobilis. Pileus 1-1½ uncias latus; stipes 3-4 uncias longus, 2-3 lineas crassus.

*Agaricus (Mycena) acutatus*, Kalchbr. & F. v. M.

Ab. A. filopede (Bulliard) cui proximus, conspicue differt *pileo* atro-cinereo, conico, *acuto*, 3 lineas alto, 2 lineas lato, stipite filiformi ad 4-5 pollices elongato, pallido.

Western Port, Miss M. Lewellin.